

HERZBERG'S TWO-FACTOR THEORY OF JOB SATISFACTION – COMPARATIVE STUDY BETWEEN PRIVATE AND PUBLIC HIGH SCHOOL TEACHERS IN CANTON SARAJEVO

SENAD BUŠATLIĆ & AMRA MUJABAŠIĆ

*International University of Sarajevo, Faculty of Business Administration,
Management, Sarajevo, Bosnia and Herzegovina, Balkans*

ABSTRACT

In today's high paced and competitive environment, the performance of an organization is crucial for its survival. The key contributors of an organization's success are the employees and employee performance. One of the major roles managers play is increasing productivity of employees and so managers are increasingly asking themselves how they can stimulate their employees and thus improve their performance and contributions. Therefore, the main purpose of this work is to study job satisfaction of teachers from high schools in Canton Sarajevo, with regard to Herzberg's two-factor theory. More specifically, it will investigate the difference between motivator and hygiene factors of job satisfaction and the total level of satisfaction among high school teachers in Canton Sarajevo. The tool used for collecting data was an adapted version of the Minnesota Satisfaction Questionnaire (MSQ) conducted on the sample of 150 high school teachers. Collected questionnaires were analysed by using the statistical program: Statistical Package for Social Sciences (SPSS), particularly descriptive statistics and a range of inferential statistical techniques. The findings showed that nearly 84% of the variance in job satisfaction is significantly explained by hygiene and motivator factors. Furthermore, the study discovered that beside Salary, Status, Work conditions, Interpersonal relationship with subordinates and Possibility for personal growth, other hygiene and motivator factors do not significantly predict job satisfaction of participants. However, when individually considered, all hygiene and motivator factors significantly correlate with job satisfaction.

KEYWORDS: *Private and Public High Schools, Teachers' Motivation, Canton Sarajevo, Hygiene Factors, Motivators, Job Satisfaction, Job Performance & Herzberg's Two-Factor Theory.*

Received: Oct 19, 2018; **Accepted:** Nov 09, 2018; **Published:** Dec 01, 2018; **Paper Id.:** IJBMRDEC20184

INTRODUCTION

The phenomena of job satisfaction can be defined as “the psychological disposition of the people toward their work, and this involves a collection of numerous attitudes or feelings” (Schultz, D. P. (1982)). Those numerous attitudes and feelings are expressed through behaviour which formulates differentiation among people and the importance of application of various motivational factors that will increase peoples' interest for work and their success. Job satisfaction became a crucial variable for long – term growth of every company around the world, without consideration of its sector of operations (Denga, 1996).

Nearly every employee works with the purpose of satisfying his or her own needs or needs of their families, while also constantly looking for satisfaction. Besides the financial costs that are associated with turnover, an organization which fails in maintaining steady and capable workforce, may suffer serious consequences in the

form of decline in performance, customer satisfaction and employee morale, which further cause numerous costs (Brewer and McMahan-Landers, 2004). For both public and private high schools, as well as all other educational institutions, these costs translate into damage to their reputation, while also causing a large decrease in well – being of society since whole families suffer. The individual approaches related to the level of satisfaction or dissatisfaction vary within the scope of various factors, which includes salaries, fringe benefits, company policies and administration, work conditions, opportunities for advancement, responsibilities given at the job, recognition, etc. (Ubom and Joshua, 2004).

In modern business, human resource management has become an important function. Namely, human resource management includes various forms of employee and manager interactions, which includes: planning, recruiting, remunerating, rewarding and termination of employment (Dessler, 2015). However, successful organizations are those that have reliable employees that are satisfied with their job, are willing to learn and grow and in this way permit themselves and the organization to be profitable. In addition, unsatisfied employees will want to quit their job and this will also cause the company to suffer considering that they will lose all previous investments put into that employee (Borcherding and Oglesby, 1977). Effective managers should also realize the importance of the human factor, because the only development of good motivational systems can help organizations increase their competitive ability and profitability.

As Bahtijarević-Šiber (1999) stated, there are three reasons for the importance of motivation:

- Improvement in productivity, efficiency/effectiveness and work creativity;
- Improvement of the work environment in organizations; and
- Strengthening the competitiveness and performance of the company.

This study aims to test how Herzberg's two – factor theory applies in the context of high school teachers that work in the region of Sarajevo, capital of Bosnia and Herzegovina. Therefore, the main role that job satisfaction has, in enhancing the performance and commitment of employees, relates to the promotion of abilities of workers to function in an effective way. Considering this, the study looks forward in answering the research questions listed below.

Research Objectives

According to the research subject, as well as theoretical and research data, the following objectives are set that should be achieved within the paper. The primary objective of the research study outlines:

- To examine whether hygiene and motivator factors have an impact on job satisfaction of private and public high school teachers in Canton Sarajevo.

According to the method of attaining the primary objective set above, certain specific or secondary objectives were developed that need to be achieved simultaneously:

- To collect all the required information and data to evaluate the present level of job satisfaction of private and public high school teachers in Canton Sarajevo.
- To examine the existence of significant difference in the level of job satisfaction between private and public high school teachers in Canton Sarajevo.
- To entitle recommendations for further improvement of job satisfaction level of high school teachers who work in both private and public schools in Canton Sarajevo.

Taking into consideration the reviewed theories and other literature, especially Herzberg's two-factor theory and the main objective that was set in this research, we can formulate the hypotheses accordingly.

H₁: There is a significant and positive relationship between each hygiene factor and job satisfaction of high school teachers in Canton Sarajevo.

H₂: There is a significant and positive relationship between each motivator factor and job satisfaction of high school teachers in Canton Sarajevo.

H₃: Hygiene and Motivator factors significantly explain the variance in job satisfaction of high school teachers in Canton Sarajevo.

H₄: There is a significant difference in job satisfaction between private and public high school teachers in Canton Sarajevo.

Definition of Key Terms

Key terms that are specific for this study are identified below:

- **Motivation:** An inner drive, impulse, intention, etc. that causes an individual to act in a certain way, e. g. an incentive or goal (Webster's New World Dictionary, 1960).
- **Job Satisfaction:** Feelings of sentimental responses that a worker has about his or her job.
- **Intrinsic – Motivational Factors:** Factors that are associated with the content of a job and bring job satisfaction (Robbins, 2001).
- **Extrinsic – Hygiene Factors:** Factors that are associated with the context of a job and bring job dissatisfaction (Robbins, 2001).
- **School Policy and Administration:** Company's policy and administration (in this study the author used School policy and administration since the main object of study were High schools) represents a perception of an employee on whether the policies of a company he works in are good or bad, fair or not, and its influence level of satisfaction an employee experiences within the company.
- **Interpersonal Relations:** One of job factors which includes those aspects of work that are characterized with establishment of interactions among co – workers and supervisor (Herzberg, Mausener and Snyderman, 1959).
- **Salary:** One of fairly simple factors whose increase or decrease reflects of satisfaction of an employee.
- **The Work Itself:** Hygiene factor from Herzberg's theory, which includes feelings caused by the work, practices or tasks required as well as feelings related to the degree of routine and struggle of completing the task (Herzberg, Mausener and Snyderman, 1959).
- **Work Conditions:** Includes those physical conditions that an employee experiences within his working environment e. g. equipment, noise, temperature, amount of work required and available amenities (Herzberg, Mausener and Snyderman, 1959).

- **Job Security:** The sense of having a secure job or not, significantly impacts the overall level of job satisfaction (Herzberg, Mausener and Snyderman, 1959).
- **Achievement:** Includes different feelings or situations which comprise successful or unsuccessful accomplishment of work, resolving certain problems and seeing the outcomes of one's efforts (Herzberg, Mausner and Snyderman, 1959).
- **Advancement:** Refers to the expected or unexpected possibility of getting promoted, which could be either positive or negative (Riley, 2005).
- **Recognition:** Acknowledgement of employee's successful completion of work (Riley, 2005).
- **Responsibility:** Degree of freedom an employee has to make decisions on his own and implement new ideas (Riley, 2005).
- **Possibility for Personal Growth:** A chance that the employee has to progress within the organization, and it also includes the possibility of learning new skills and acquiring new knowledge (Riley, 2005).
- **Public School:** School owned or run under the guidance of a publicly organized educational agency (Radojičić2012).
- **Private School:** School owned or run under the guidance of a private person, organization or corporation, instead of a public agency (Radojičić 2012).

LITERATURE REVIEW

Motivation is a complex concept where job satisfaction is considered as a pivot, thus enabling for theories of motivation to be considered as theories of job satisfaction. The basic motivation process is established on three basic elements: the need, effort and reward. The need represents a state of psychological or physiological imbalance/tension that needs to be satisfied. The effort is an action taken to remove the tension and finally, the reward is the achievement which removes the tension (Ivancevich, Konopaske and Matteson, 2005). Considering this, we can compare the relationship between job satisfaction and motivation to the kind of connection between the famous chicken and egg concept since we cannot separate motivation from job satisfaction, and vice versa. An employee cannot be motivated if he or she is not satisfied with his/her job, while it means that if an employee experiences a high level of satisfaction with his/her job, he/she is also motivated towards completing that job.

THEORIES OF MOTIVATION

Throughout history there have been numerous developments of motivation theories which have been based on different assumptions and emphasize different dimensions of human behaviour. Abraham Maslow is considered to be the founder of the theory of motivation in which he developed the famous "Hierarchy of Needs" (Hoffman, 1988). Later, many other theoreticians built on to Maslow's hierarchy of needs theory with their contributions to the subject (McLeod, 2015). Moreover, there are two main perspectives under which motivation can be classified and these include: content motivation theories and process motivation theories which will be discussed in more detail below.

Content theories focus on the causes and they try to determine “WHAT” motivates people. According to Stott (2011), content theories of motivation include: Maslow’s Hierarchy of Needs Theory; Alderfer’s ERG Theory; McClelland’s Acquired Needs theory and Herzberg’s Two-Factor Theory.

Maslow’s Hierarchy of Needs Theory

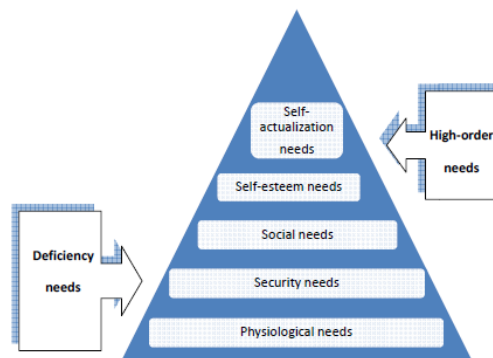


Figure 1: Maslow’s Hierarchy of Needs (Slideshare-Muezart, 2013)

According to Maslo ((1954), behaviour depends on a person’s desire to satisfy one or more of the five basic needs which include: physiological needs, security needs, social needs, self-esteem needs and self-actualization. The needs are satisfied according to the hierarchy concept from the lowest (physiological) to the highest (self-actualization) which Maslow presented in a pyramid (see Figure 1.).

Maslow’s Hierarchy of Needs Theory suggests that people satisfy their needs according to a specific order, meaning that when a person satisfies the basic physiological needs such as those for food and water, they cannot move up to the next level of needs. Therefore, the needs higher at hierarchy are not recognized until those lower are achieved. Moreover, when one level of needs is achieved it does not anymore provide influence on overall behaviour and this result with focusing on the need which has higher position in the hierarchy.

Alderfer’s ERG Theory

Alderfer presented a modification of Maslow’s Hierarchy of Needs in 1973, where he developed a wider model by adding a few more levels of needs. Unlike the original, Alderfer’s study was based on research in organizational settings (Pinder, 1998). The ERG theory was created by Clayton Alderfer in 1973. Namely, the ERG theory specifies three categories of human needs as based on Maslow’s model (Berl and Williamson, 1987):

- *Existence needs*, relate to the psychological and safety needs that Maslow stated and such needs can be considered as material needs.
- *Relatedness needs*, needs relate to the social needs of Maslow’s theory.
- *Growth needs*, relate to Maslow’s esteem and self – actualization needs.

McClelland’s Acquired Needs Theory

Another researcher who also highly contributed to the development of content theories is David McClelland,

whose work is mainly a basis for numerous other researches. As Miner (2006) explains, McClelland theory is based on three main motives relevant for an organizational environment: *Achievement needs*, *Power needs* and *Affiliation needs*. As opposed to Maslow, who has made a distinction among any transition between needs, McClelland states that the main fact is that some people simply have higher needs than others. Furthermore, according to his theory, needs change during the lifetime since they are shaped by experience.

Herzberg's Two – Factor Theory

This theory created high interest for managers and academics who were searching for techniques of motivating their subordinates. As stated in his work (Herzberg, 1968), the theory is based on two assumptions: The first assumption is that satisfaction and dissatisfaction are not on opposite ends of the same continuum, rather they are two continuums associated with various factors. The second assumption included two categories of factors of motivation: intrinsic or motivators, which are job content factors and extrinsic or hygiene, which are job context factors (Burton, 2012, p. 10). He proposes that both satisfaction and dissatisfaction are initiated by diverse factors. At work, people are satisfied by factors that are related to the content of their work. Those are the intrinsic factors or motivators. More specifically, they present situational factors that refer to the job itself and include achievement, recognition, interesting work, responsibility, advancement and growth. On the other side, factors that cause people to be unhappy with their job are extrinsic or hygiene factors. Those factors are related to factors outside of the job an individual does and include company policy and administration, supervision, working conditions, interpersonal relationships, salary, status and security. The main difference between them is that hygiene factors are not related to the content, but rather in the context of job (Herzberg, 1974).

EVALUATION OF HERZBERG'S TWO – FACTOR THEORY

Justification for Choosing Herzberg's Two – Factor Theory

Herzberg's theory provided numerous studies done in cross – cultural circumstances, e. g. study by Sledge et al. (2008) done among employees of a Brazilian hotel, while also Usugami and Park (2006) studied Japanese companies in Korea. The empirical studies that were evaluated also showed an important fact about the two-factor theory: it is very diverse, meaning that it does not focus only on one group of employees or only one area of culture and its universality enables usage across cultures.

Job Satisfaction and Employees from Private and Public Sector

Asst. Prof. Dr. Renata Borges conducted a comparative study on job satisfaction among 670 professionals from the public and private sector in Brazil (Borges, 2013). She has found that the overall level of job satisfaction is significantly higher in the public sector than in the private sector. Her findings suggest that public sector workers will experience a higher level of job satisfaction if their salary or other extrinsic rewards are higher, as opposed to private sector employees who express higher levels of job satisfaction when job features such as job conditions and social environment are better. A. Matei and M. Fataciune used Job Satisfaction Survey on 120 full-time educational sector employees to measure the degree of job satisfaction among private and public high school teachers in Romania. They have found the biggest difference on two dimensions of intrinsic factors, particularly 'supervision' and 'co-workers', where employees from the private sector have shown a higher level of job satisfaction than those employed in the public sector. The overall job satisfaction also differed among two sectors. Employees from the private sector were ambivalent, or moderately

satisfied with their job in general, while employees working in the public sector showed a higher level of satisfaction overall. N. Ayub from the Institute of Business management, reported in her work "A Comparative Study of Private and Public Teachers Job Satisfaction" that it is an obvious fact that higher levels of motivation have a direct association to a higher level of job satisfaction. Furthermore, those teachers who have shown a higher level of job satisfaction also showed higher productivity levels, which further results in better achievement of students and improvement in their motivation as well.

Private and Public Sector in Bosnia and Herzegovina

Private and public sector present complementary parts of every economy and without their compatibility it is impossible to maintain an uninterrupted economic growth. In economies in transition, such as the one in Bosnia and Herzegovina, the public sector has a more important role in overall economic relations, as opposed to developed economies. Therefore, the public sector is more attractive to employees due to the level of security of wage payment, complete fulfilment and respect of positive law norms and some other factors. Within the public of Bosnia and Herzegovina there is a perception that the average salary in the public sector is significantly greater than the average salary in the private sector, which can be considered as another convenient factor for employment in the public sector.

In undeveloped economies, where unemployment rates are normally high, the supply of labour force is consequently high as well, so that workers do not have the opportunity to choose among many options and thus usually accept the first workplace offered. The same situation is in Bosnia and Herzegovina.

An important characteristic of the labour market in Bosnia and Herzegovina is the high level of employment in the public sector as compared to total employment. According to reports from the Agency for Statistics of Bosnia and Herzegovina, a proxy was made by using report on employment by activity from July 2016. Accordingly, in Bosnia and Herzegovina 40.8% of employed people work in the public sector, which is 0.6% less than in December 2015.

METHODOLOGY

Research Design

The empirical investigation conducted within this study used a descriptive research. Variables directed to this study are centralized around the main factors identified in the literature review, particularly motivator and hygiene factors. The comparative study method was chosen to compare and describe the phenomena of job satisfaction and is relatively economical when taking into account both time and resources. Also, this choice of study method is appropriate when considering variables which cannot be easily distinguished and the situation itself does not allow for conducting an experimental study.

Sources of Data Collection

The authors of the paper used completed questionnaires from respondents as the primary data collection source. Subjects of the study included teachers working in private and public high schools in Canton Sarajevo. According to information retrieved from the official web page of the Canton Sarajevo Ministry for Education, Science and Youth, within the area of Canton Sarajevo operate 40 High Schools, including regular schools and schools for children with special needs. Out of this number, 4 or 10.0% are of a private ownership and 36 or 90.0% are public. This information is presented in Table 1 below.

Table 1: List of Private and Public High Schools in Canton Sarajevo (Sarajevo Canton, Ministry for Education, Science and Youth, 2015)

No	Institution (Bosnian)	Institution (English)	Ownership
1	Centarzaslijepuislabovidnudjecui omladinu	Centre for the Blind and Visually Impaired Children and Youth	Public
2	Centarzaslušnugovornurehabilitacija	Centre for Hearing and Speech Rehabilitation	Public
3	Četvrtagimnazija	The fourth High School	Public
4	Drugagimnazija	The second High School	Public
5	Elektrotehničkaškola za energetiku	School of Electrical Engineering for Energy	Public
6	Gazi Husrev – Begova Medresa	Gazi Husrev – Bey's Madrasah	Public
7	Gimnazija Dobrinja	Dobrinja High School	Public
8	Gimnazija Obala	Obala High School	Public
9	Katolički školski centar – srednja medicinska škola	Catholic School Centre – Medical High School	Public
10	Katolički školski centar – Općaralna gimnazija	Catholic School Center – General High School	Public
11	Međunarodna srednja škola Sarajevo	International High School Sarajevo	Private
12	Perzijsko – bosansko ledžsainternatom	Persian – Bosnian college with boarding school	Private
13	Petagimnazija	The fifth High School	Public
14	Prvabošnjačkagimnazija	The first Bosniak High School	Public
15	Prvagimnazija	The first High School	Public
16	Školazasrednjestručnoobrazovanje i radnoosposobljavanje	School for Vocational Education and Vocational Training	Public
17	Srednja ekonomska škola	High School of Economics	Public
18	Srednja elektrotehnička škola	School of Electrical Engineering	Public
19	Srednja građevinskogeo-detska škola	Central Building Geodetic School	Public
20	Srednja mašinska tehnička škola	Secondary Technical School	Public
21	Srednja medicinska škola	Medical High school	Public
22	Srednja medicinska škola – Jezero	Medical High School – Jezero	Public
23	Srednja muzička škola	Music High School	Public
24	Srednja poslovno – komercijalna trgovačka škola	Central Business – commercial and Trade School	Public
25	Srednja škola metalnih zanimanja	High School of Metalwork occupations	Public
26	Srednja škola poljoprivrede, prehrane, veterinarske i službenih djelatnosti	High School of Agriculture, Food, Veterinary and Service Activities	Public
27	Srednja škola primijenjenih umjetnosti	High School of Applied Arts	Public
28	Srednja škola za okoliš i drvni dizajn	High School of Environment and Wood design	Public
29	Srednja škola za saobraćaj i komunikacije	High School for Transport and Communications	Public
30	Srednja škola za tekstil, kožu i dizajn	High School for Textile, Leather and Design	Public
31	Srednja tehnička škola grafičkih i tehnologija, dizajna i multimedije	High Technical School of Graphic Technology, Design and Multimedia	Public
32	Srednja ugostiteljska –	High School for Catering and	Public

	turističkaškola	Tourism	
33	Srednjazubotehničkaškola	Dental High School	Public
34	Srednjoškolskicentar “NedžadIbrišimović” Ilijaš	High School Centre “NedžadIbrišimović” Ilijaš	Public
35	SrednjoškolskicentarHadžići	High School Centre Hadžići	Public
36	SrednjoškolskicentarVogošća	High School Centre Vogošća	Public
37	Trećagimnazija	The third High School	Public
38	Tursko – bosanski Sarajevo Koledž	Turkish – Bosnian Sarajevo College	Private
39	Željezničkiškolskicentar	Railway School Centre	Public
40	Privatnainternacionalnagimnazija “Bloom”	Private International High School “Bloom”	Private

An official publication of the “Canton Sarajevo in numbers” was published by The Federal Office of Statistics of Federation of Bosnia and Herzegovina in February 2016, says that the educational sector employs 1741 people, out of which 1156 or 66.4% are women and 585 or 33.6% are men. Accordingly, 179 employees work in private high schools and 1562 work in public high schools.

Sampling Design

The sample was chosen by applying stratified random sampling techniques. One of very important characteristics of probability sampling is the element of randomization, which assures that every individual from the population, as a potential respondent, has an equal chance of being a participant in the study (Groves, 2009). In 40 high schools of Sarajevo Canton, there are 1741 teachers (179 from private sector and 1562 from the public sector). Table 2 shows distribution of population and sample, as well as the formula for calculating sample size.

Table 2: Population and Sample Distribution (Author’s Compilation)

No	School Category	Total Number	Population (N)	Sample (n)
1	Private	4	179	15
2	Public	36	1562	135
Total			N=1741	n=150

$$\text{Formula for determining sample size: } n = \frac{N}{(1+N(e)^2)}$$

Based on the procedure of identifying representative teachers from both sectors, out of the total number of 179 private high school teachers 15 (10%) were taken as representatives and out of 1562 public high school teachers, 135 (90%) were taken as representatives. Therefore, the sample size consisted of 150 respondents from the high school sector. Moreover, it can be stated that a primary source was used to obtain and analyse data.

Methods and Instrument of Data Collection

The questionnaire was used as the most convenient method for gathering data. The first part of the questionnaire included development of Personal data schedule and it asked for basic information about the participants, including demographic information. The second part is The 1967 Long form Minnesota Satisfaction Questionnaire (MSQ), which was adapted and used for assessing the two factors of the population’s level of job satisfaction through 20 dimensions of the job which directly contribute to job satisfaction. It was developed by University of Minnesota in 1977, being widely used for measuring teacher’s job satisfaction in Herzberg’s dimensions of satisfaction – both motivator and hygiene. This questionnaire was chosen mainly because it is a renowned instrument designed particularly for measurement of phenomena

of job satisfaction (Wise et al., 1967). Also, it is gender neutral and it can be administered to both groups and individuals. Another important advantage of MSQ is its simplicity and the fact that it can be quickly and easily managed.

Even though the questionnaire does not have a time limit for fulfilment, it is estimated that it seeks for 15 – 20 minutes for a participant to complete it. However, participants of this study were given one day for completing the questionnaire and those who did not manage to do it within one day, received it once again. The items within the questionnaire were measured on a five – point Likert scale: Very Dissatisfied (VD), Dissatisfied (D), Undecided (N), Satisfied (S) and Very Satisfied (VS).

Human Subject Permission

All the participants who took part in the research were informed about the purpose of the research and usage of the data. All participants who voluntarily accepted to take part in the research gave their consent and permission for using the data they provided.

Adaptation of Original Minnesota Satisfaction Questionnaire (MSQ)

The original Minnesota Satisfaction Questionnaire (MSQ) was modified, making it suitable for the selected sample. As opposed to 100 items in the original, the adapted version contained 45 items. Further, the adapted version of the questionnaire was translated from English to Bosnian language by a certified court translator. This adapted version passed a pilot study for examination of understanding and clearance. A pilot study was conducted among five volunteers of various backgrounds, including different age, education and both genders. Job satisfaction of high school teachers from Canton Sarajevo is measured with one single item in the questionnaire. According to Wanous, Reichers and Hudy (1997), previous researches on job satisfaction showed that the reliability of a single – item measurement of job satisfaction is 0.67. The item used to be “How satisfied are you with your job in general?” High school teachers gave their general evaluation about their job satisfaction on a five – point Likert scale from very dissatisfied to very satisfied.

Reliability

Test reliability coefficients were tested using Cronbach alpha formula, showing the results of 0.803 and 0.756. These results made the adopted test reliable enough to be used for this study, since many methodologists recommend a minimum α coefficient between 0.65 and 0.8 (or higher in many cases); α coefficients that are less than 0.5 are considered as unacceptable.

**Table 3: Motivator and Hygiene Variables – Reliability Test Results
(Author’s Compilation)**

Cronbach’s Alpha Coefficient	Variable	N - items
$\alpha=0.803$	Motivator	17
$\alpha=0.756$	Hygiene	28

* α range: from 0 to 1

Validity

The official manual for Minnesota Satisfaction Questionnaire (MSQ) provides evidence that validity coefficients for this questionnaire vary between 0.5 and 0.7 but additional content and face validity were established through pilot testing. Also, a personal data sheet was used for collecting background information of participants, including age, gender, education, experience, earnings and marital status.

Data collected through questionnaires were tabulated in Microsoft Excel and then coded and analysed using the Statistical Package for Social Sciences (SPSS), version 24. Methods used for analyzing the data in SPSS included descriptive statistics with mean, variance and standard deviation. Correlation Coefficient Method for measuring the strength of association between the two variables. Independent samples t – test to find if there is a significant difference between job satisfaction of private and public high school teachers and Multiple Regression Model to find whether hygiene and motivator factors significantly explain the variance in the general level of job satisfaction.

Descriptive Statistics

According to Zigmund (2003), descriptive statistics refer to a process that transforms raw data into understandable information that is much easier to interpret. The region of Sarajevo Canton employs totally 1741 teachers, out of which 150 participated in this research. Considering the fact that people in this region are generally not so intensively involved in research participation, and that even they do not like to take part in any, this response rate is found to be acceptable.

Table 4: Demographic Characteristics of the Sample (Author's Compilation)

Demographic Variables		Private School		Public School	
		Frequency	Percent	Frequency	Percent
Gender	Male	7	46.7	56	41.5
	Female	8	53.3	79	58.5
Age	Under 25	1	6.7	9	6.7
	26 – 35	4	26.7	36	26.7
	36 – 45	7	46.7	63	46.7
	Older than 46	3	20.0	27	20.0
Level of Education	High School	0	0	0	0
	Bachelor's degree	9	60	83	61.5
	Master's degree	6	40	52	38.5
	Doctoral degree	0	0	0	0
Tenure in Present Occupation	One year or less	2	13.3	11	8.7
	2 – 5 years	4	26.7	43	31.9
	6 – 10 years	5	33.3	43	31.9
	More than 10 years	4	26.7	38	28.1
Basic Salary per Month (in BAM)	Less than 600	2	13.3	6	4.4
	600 – 800	2	13.3	13	9.6
	800 – 1,000	7	46.7	60	44.4
	1,000 – 1,200	4	26.7	56	41.5
	More than 1,200	0	0	0	0
Marital Status	Single	3	20.0	21	15.6
	Married	11	73.3	110	81.5
	Divorced	0	0	0	0
	Widowed	1	6.7	4	3.0

Personal Background of Respondents

The personal characteristics of respondents are described through frequency and percentage within every variable – gender, age, level of education, tenure in present occupation, salary level and marital status. The results of descriptive statistics can be seen in Tables 5 and 6.

An additional question was provided in a personal sheet for participants to measure the general level of job satisfaction, which is our dependent variable. As it can be seen from the table, it is evident that the mean score for our dependent variable is between three (3) and four (4), which stand for “average” and “good level” respectively. This means

that majority of respondents have a fairly good level of satisfaction with respect to their job.

Table 5: Descriptive Statistics for Dependent Variable (Author's Compilation)

	N	Minimum	Maximum	Mean	Std. deviation	Variance
Job satisfaction	150	1.53	4.81	3.6831	.65913	.429

Descriptive Statistics for Hygiene Factors

The main characteristic of hygiene factors or dissatisfiers is not adding satisfaction, but rather simply preventing dissatisfaction and these factors are needed for motivation maintenance. These factors include interpersonal relations with subordinates and supervisors, working conditions, salary, job security and status. The results are presented below.

Table 6: Descriptive Statistics for Hygiene Factors (Author's Compilation)

Hygiene Factors	Private School Teachers			Public School Teachers		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation
School Policy and Administration	15	3.60	1.056	135	2.99	1.096
Interpersonal Relationship with Supervisor	15	3.80	1.014	135	3.16	1.233
Salary	15	4.00	.845	135	3.33	1.058
Work conditions	15	3.07	.458	135	3.79	.973
Interpersonal Relations with Subordinates	15	4.20	.862	135	3.77	1.036
Job Security	15	2.93	.799	135	3.15	.910
Status	15	2.33	.976	135	3.30	1.120

Descriptive Statistics for Motivator Factors

The main characteristic of motivator factors is that they act as enhancers of job satisfaction and they contribute to increasing the level of job satisfaction, while their absence result with no job satisfaction rather than with job dissatisfaction. These factors include advancement, achievement, recognition, responsibility, work itself and personal growth.

Table 7: Descriptive Statistics for Motivator Factors (Author's Compilation)

Motivator Factors	Private School Teachers			Public School Teachers		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation
Achievement	15	3.13	.915	135	3.54	1.105
Advancement	15	2.67	1.291	135	2.65	.941
Recognition	15	3.07	.961	135	3.48	.102
Responsibility	15	3.33	.724	135	3.21	.838
Personal Growth	15	2.40	.986	135	2.43	.910
Work itself	15	2.53	.640	135	3.24	1.026

Inferential Statistics

To test the hypotheses that private and public high school teachers were associated with statistically significant differences in hygiene and motivator variables, a range of inferential statistics techniques were completed: Correlation coefficient, Independent samples t – test and Multiple Regression. Results and interpretations are explained later in the text.

The Hypothesis 1 can be formulated in a form of null and alternative hypotheses as follows:

- **Null hypothesis:** There does not exist a significant and positive relationship between each hygiene factor and job satisfaction of high school teachers in Canton Sarajevo.
- **Alternative Hypothesis:** There is a significant and positive relationship between each hygiene factor and job satisfaction of high school teachers in Canton Sarajevo.

To test the first hypothesis and check whether there is a significant relationship between each hygiene factor of motivation and job satisfaction, the author computed Pearson's Product Moment Correlation in SPSS. The results of this analysis of Pearson's Correlation Coefficient are obtained for the whole sample of 150 teachers and presented in a form of Correlation Matrix in Table 8 below.

Table 8: Correlation Matrix - Hygiene Factors (Author's Compilation)

	Variables	1	2	3	4	5	6	7	8
1	School policy and administration	1							
2	Interpersonal relationship with supervisor	.57**	1						
3	Salary	.82**	.41**	1					
4	Work conditions	.84**	.68**	.71**	1				
5	Interpersonal relationship with subordinates	.56**	.52**	.60**	.52**	1			
6	Job security	.80**	.51**	.82**	.71**	.66**	1		
7	Status	.78**	.45**	.88**	.77**	.39**	.66**	1	
8	Job satisfaction	.29**	.21**	.25**	.35**	.03*	.68**	.78**	1

** Correlation is significant at the 0.01 level (2 – tailed).

* r range between 0 and 1

As it can be seen from the Table 9 above, all the obtained coefficients are above 0 (positive association) and close to 1 (perfect linear relationship). Thus, the results obtained through SPSS computation of Pearson's correlation coefficient showed that all the factors from group of hygiene factors of motivation have a statistically significant positive relationship with job satisfaction at 99% of significance ($p - value = 0.01$). Accordingly, these results do not allow for support of Null hypothesis, and thus support the Alternative hypothesis or Hypothesis 1 which proposed that "There is a significant and positive relationship between each hygiene factor and job satisfaction of high school teachers in Canton Sarajevo".

Testing Hypothesis 2

The Hypothesis 2 can be stated in a form of null and alternative hypotheses as follows:

- **Null Hypothesis:** There does not exist a significant and positive relationship between each motivator factor and job satisfaction of high school teachers in Canton Sarajevo.
- **Alternative Hypothesis:** There is a significant and positive relationship between each motivator factor and job satisfaction of high school teachers in Canton Sarajevo.

Table 9: Correlation Matrix - Motivator Factors (Author's Compilation)

	Variables	1	2	3	4	5	6	7
1	Achievement	1						
2	Advancement	.30**	1					
3	Recognition	.27**	.34**	1				

Table 9: Contd.,								
4	Responsibility	.11**	.22**	.76**	1			
5	Possibility for personal growth	.22*	.35**	.80**	.81**	1		
6	Work itself	.07	.18**	.62**	.62**	.62**	1	
7	Job satisfaction	.33**	.29**	.70**	.36**	.36**	.33**	1

** Correlation is significant at the 0.01 level (2 – tailed).

* r range between 0 and 1

The results that were obtained through SPSS computation of Pearson's Correlation Coefficient show value of correlation coefficients which are higher than 0 (positive association) and close to 1 (perfect linear relationship). As it can be concluded from the data, at the 99 % level of significance ($p - value = 0.01$), all the motivator factors have a statistically significant positive relationship with job satisfaction. Therefore, these results do not support the Null hypothesis and provide support for our Alternative hypothesis or Hypothesis 2 that "There is a significant and positive relationship between each motivator factor and job satisfaction of high school teachers in Canton Sarajevo".

Testing Hypothesis 3

The third hypothesis was formulated in a form of Null and Alternative hypotheses:

- **Null Hypothesis:** Hygiene and Motivator factors do not significantly explain the variance in job satisfaction of high school teachers in Canton Sarajevo.
- **Alternative Hypothesis:** Hygiene and Motivator factors significantly explain the variance in job satisfaction of high school teachers in Canton Sarajevo.

To determine the extent to which hygiene and motivator factors explain the variance in job satisfaction of high school teachers in Canton Sarajevo, multiple regression analysis was performed. The model summary of the results of the multiple regression analysis is presented in the tables below.

Table 10: Results of Multiple Regression – Model Summary (Author's Compilation)

Mode 1	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.921 (a)	.848	.836	.26603

(a) **Predictors:** (Constant), School policy and administration, Interpersonal relationship with supervisor, Salary, Work conditions, Interpersonal relationship with subordinates, Job security, Status, Achievement, Advancement, Recognition, Responsibility, Possibility for personal growth, Work itself

Table 11: Results of Multiple Regression – ANOVA (Author's Compilation)

Mode 1	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	65.028	11	5.912	83.529	.000 (a)
Residual	11.677	165	.071		
Total	76.705	176			

(a) **Predictors:** (Constant), School policy and administration, Interpersonal relationship with supervisor, Salary, Work conditions, Interpersonal relationship with subordinates, Job security, Status, Achievement, Advancement, Recognition, Responsibility, Possibility for personal growth, Work itself

(b) **Dependent Variable:** Job satisfaction

From the Table 10 we can see that $R = 0.921$ (range is between 0 and 1), which presents the correlation that independent variables have with the dependent variable, after we consider all the inter – correlations. The R Square of

0.848 (Range is between 0 and 1) is the explained variance in job satisfaction by independent variables. For an R square of 0.848 we can say that the model explains 84.8% of the variations in real life and so the model is a good model.

Table 11 shows the results of ANOVA test, from which we can see that the F value is 83.529, which is significant at 99% of significance. High F – value means that there is more chance of rejecting the Null hypothesis. Further, significant tells us the confidence level (1-sig) of accepting the alternative hypothesis. Accordingly, since sig=0.000, we have $1-0.000=1$; we are 100% confident that the alternative hypothesis is accepted. Therefore, according to these results, we can draw a conclusion that 83.6% of the variance in job satisfaction of high school teachers is significantly explained by hygiene and motivator factors. Hence, this conclusion does not support our Null hypothesis and provides support for the Alternative hypothesis and Hypothesis 3 that “Hygiene and Motivator factors significantly explain the variance in job satisfaction of high school teachers in Canton Sarajevo”.

Table 12: Results of Multiple Regression – Coefficients (Author’s Compilation)

Mode 1		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
	(Constant)	.485	.183		2.654	.009
	School policy and administration	.130	.078	.137	1.677	.095
	Interpersonal relationship with supervisor	.032	.061	.038	.522	.602
	Salary	.567	.104	.618	5.449	.000
	Work conditions	.331	.065	.426	5.089	.000
	Interpersonal relationship with subordinates	.244	.056	.247	4.347	.000
	Job security	.193	.111	.198	1.657	.059
	Status	-.340	.067	-.418	-5.036	.000
	Achievement	.032	.062	.027	.516	.606
	Advancement	.029	.063	.041	.512	.604
	Recognition	.198	.114	.205	1.729	.086
	Responsibility	.106	.056	.120	1.879	.062
	Possibility for personal growth	-.473	.064	-.579	-7.332	.000
	Work itself	.083	.044	.088	1.904	.059

The next table that was computed as a part of Results of Multiple Regression (Table 13below), allows for drawing a conclusion which of the titled independent variables influence the most variance of job satisfaction of high school teachers in Canton Sarajevo.

As it can be seen from the column of Standardized Coefficients and results of Beta, we can conclude that the independent variables that are significant at 0.01 level of significance are only Salary, Status, Work conditions, Interpersonal relationship with subordinates and Possibility for Personal Growth ($p - value=0.000<0.01$).

Therefore, according to these results we can say that when other variables are controlled, only Salary, Status, Work conditions, Interpersonal relationship with subordinates and Possibility for Personal Growth show significant correlation with the general level of Job satisfaction.

However, when the author tested Hypothesis 1 and 2 (Tables 8 and 9 above), it can be seen that when they are considered individually, all hygiene and motivator factors showed significant correlation with job satisfaction. We may

conclude that there is a contradiction with the results of multiple regression.

This situation is possible, because when we employ multiple regression, the variance that the first independent variable has with dependent variable can intersect with variance which is distributed between the other independent variable and dependent variable. Thus, the first independent variable is no longer universally predictive and would not show up as being significant in analysing multiple regression. Therefore, according to this research results, beside Salary, Status, Work conditions, Interpersonal relationship with subordinates and Opportunity for personal growth, all other hygiene and motivator factors do not present a significant predictor of job satisfaction.

Hence, since out of 13 independent variables, only five of them showed significance, we cannot support the Alternative hypothesis or Hypothesis 3, while Null hypothesis which states that “Hygiene and Motivator factors do not significantly explain the variance in job satisfaction of high school teachers in Canton Sarajevo” is supported.

Testing Hypothesis 4

The fourth Hypothesis is stated in form of null and alternative hypothesis as follows:

- **Null Hypothesis:** There is no significant difference in job satisfaction between private and public high school teachers in Canton Sarajevo.
- **Alternative Hypothesis:** There is a significant difference in job satisfaction between private and public high school teachers in Canton Sarajevo.

In order to test whether there exists a significant difference between the two groups of high school teachers in Canton Sarajevo, the independent samples t – test was computed. Results obtained from this SPSS analysis are shown in the tables below.

Table 13: Results of Independent Samples t – test: Group Statistics (Author’s Compilation)

	High School	N	Mean	Std. Deviation	Std. Error Mean
Job satisfaction	Private	15	3.7986	.68821	.07249
	Public	135	3.5169	.56471	.06121

Table 14: Results of Independent Samples t - test: Equality of Means (Author's Compilation)

	t	df	p
Job satisfaction	4.231	175	0.000<0.01

As it can be seen from the tables, the difference in mean value of 3.8 and 3.5 with a standard deviation of 0.7 and 0.6 for teachers in private and public high schools of Canton Sarajevo is significant at 0.01 level of significance ($t(175) = 4.23$, $p\text{-value} = 0.000 < 0.01$). Such results provide enough evidence to not support the Null hypothesis and to support the Alternative hypothesis or Hypothesis 4 that “There is a significant difference in job satisfaction between private and public high school teachers in Canton Sarajevo”.

Summary of Results

At the end of this part which evaluates and discusses results of the SPSS analysis, a summary table is presented below.

Table 15: Summary of Results (Author's Compilation)

H₁: There is a significant and positive relationship between each hygiene factor and job satisfaction of high school teachers in Canton Sarajevo.	Supported
H₂: There is a significant and positive relationship between each motivator factor and job satisfaction of high school teachers in Canton Sarajevo.	Supported
H₃: Hygiene and Motivator factors significantly explain the variance in job satisfaction of high school teachers in Canton Sarajevo.	Not supported
H₄: There is a significant difference in job satisfaction between private and public high school teachers in Canton Sarajevo.	Supported

CONCLUSIONS

The main focus of the study was to conduct a comparative analysis on job satisfaction between teachers who are employed in private high schools and public high schools of Canton Sarajevo. Furthermore, the whole study was based on the analysis of applicability of Herzberg's two-factor theory of job satisfaction. The study sample was selected by using stratified sampling methods and it consisted of 150 teachers who work in both private and public high schools of Canton Sarajevo and who voluntarily accepted to take a part in the study. 15 teachers worked in private high schools (10% of the sample) and 135 teachers worked in public high schools (90% of the sample). Data for the study was collected by using a questionnaire, particularly the Minnesota Satisfaction Questionnaire (MSQ) was adapted for this purpose. Also, preparation of data collection passed a pilot study to ensure that it is suitable and reliable for different age groups, occupations and experiences. Besides the questions from the MSQ, participants were asked to fill in a personal sheet which included some basic personal information: gender, age, education, tenure in present occupation, basic salary per month, marital status and the level of job satisfaction in general. The analysis of collected data included tabulation in MS Excel and analysis in the Statistical Package for Social Sciences (SPSS), Version 24. The results of the descriptive statistics reported the existence of differences between mean scores of hygiene and motivator variables for private and public high school teachers. The main objective of this research aimed to find out the impact that hygiene and motivator factors have on job satisfaction of high school teachers in Canton Sarajevo which was stated in the first three hypotheses. According to the results presented before, we can draw a conclusion that the first objective of this study was successfully and comprehensively accomplished.

One of the secondary objectives of the research was to evaluate the present level of job satisfaction among high school teachers which was achieved through usage of a single-item method, where participants were asked the additional question on their general level of job satisfaction. The other secondary objective was accomplished through testing Hypothesis 4.

Furthermore, the author wanted to examine how the results can be understood and used for improvements in areas where participants showed the highest dissatisfaction. School directors and Ministries can use the recommendations delivered from the study results to initiate steps that will increase satisfaction of high school teachers in Sarajevo Canton.

- Since the results showed that opportunity for personal growth significantly predicts job satisfaction, responsible agencies and Ministries should implement more on-the-job and off-the-job trainings which will constantly improve the knowledge and skills of teachers and keep them updated to modern techniques. Already existing seminars and workshops should be taken to the next level and allow teachers to constantly develop and improve themselves.

- It is extremely important that every person who achieves a certain goal, gets recognition for it. The same applies for the educational sector. Teachers who fulfilset goals and who participate positively in improvements of the school environment should receive awards and recognition. This is not necessarily a financial award, but even a small verbal praise in front of colleagues is motivating.
- Quality management is important in every aspect of the society. Therefore, every educational institution should develop appraisal elements in advancement and salary, which will be dependent on performance.
- Also, it is very important to periodically undertake employee satisfaction surveys to receive a right picture of how satisfied employees actually are.
- Finally, for successful performance of both teachers and students, every teacher must have sufficient working conditions and resources for work.

In the modern business environment, the staff has become the most important factor in productivity and in achieving competitive advantage. Forces of production such as land, material capital and physical labour that were the main competitive factors used in the industrial age are now being replaced by science, knowledge and ability, creativity and intellect of the people. These new competitive factors are fit for the 21st century since it is characterized by a modern information age. Nonetheless, such factors still exist in companies and represent an essential part of business processes.

REFERENCES

1. Adair, J. (2006). *Leadership and Motivation*. London, England: Kogan Page Ltd.
2. Amabile, T. and Khair, M. (2008). *Creativity and the Role of the leader*. Harvard Business Review.
3. Amoako, G. K. (2011). *Application of Frederick Herzberg's Two – Factor theory in assessing and understanding employee motivation at work*. European Journal of Business and Management, 3 (9), 26-29.
4. Bhondve, A. M. I. T., Kasbe, A. B. H. I. R. A. M., Mahajan, H. E. M. A. N. T., & Sharma, B. (2013). *Assessment of job satisfaction among fishermen in southern-east costal area of mumbai, India*. General Med, 2, 65-74.
5. Ayub, N. (2010). *A Comparative Study of Private and Public Universities Teachers Job Satisfaction*. Pakistan: Institute of Business Management.
6. Babić, L. (2013). *Motivacijaprofesorairefleksijanamotivacijuučenika*. (Master Thesis, SingidumUniversity Belgrade). Retrieved from: <https://singipedia.singidunum.ac.rs>.
7. Bahtijarević-Šiber, F. (1999). *Menadžmentljudskihpotencijala*. Zagreb, Croatia: Golden marketing.
8. Berl, R. L and Williamson, N. C. (1987). *A review of the content theories of motivation as they apply to sales and sales management*. American Business Review (Vol 5., pp.53).
9. Borcharding, J. D. and Oglesby, C. H (1977). *Motivating the lower level supervisory staff and workforce on super projects*. Chicago, Illinois (pp. 237 – 248).
10. Borges, R. (2013). *Are public officials really less satisfied than private sector workers? A comparative study in Brazil*. Rev. Adm. Pública, 47(6). Brazil, Rio de Janeiro. Retrieved from <http://www.scielo.br>.
11. Brewer, E. W. and McMahan – Landers, J. (2003). *Job satisfaction among industrial and technical teacher educators*. Journal of Industrial Teacher Education, pp. 65 – 85.

12. Bunch, M. E. (1958). *The Concept of Motivation. The Journal of General Psychology*, 56, pp. 189 – 205.
13. Burton, K. (2012). *A Study of Motivation: How to Get Your Employees Moving* (SPEA Honors Thesis, Indiana University). Retrieved from: <https://spea.indiana.edu>.
14. Collins, G. E. and Devanna, M. A. (1999). *Izazovimenadžmenta u XXI stoljeću*. Zagreb, Croatia.
15. Curral, S. C., Towler, A. J., Judge, T. A. and Kohn, L. (2005.). *Pay satisfaction and organizational outcomes. Personnel Psychology* (Vol. 58, pp. 613 – 640).
16. Danish, R. Q. and Usman, A. (2010). *Impact of Reward and Recognition on Job Satisfaction and Motivation: An Empirical Study from Pakistan. International Journal of Business and Management*, 5 (2).
17. Denga, D. I. (1996). *Human engineering for high productivity in industrial and other work organization*. Rapid Educational Publishers.
18. Dessler, G. (2015). *Human Resource Management. 14th edition, Global Edition*.
19. Fincham, R. and Rhodes, P. (2005). *Principles of Organizational Behavior. 4th edition*. Oxford.
20. Gius, M. (2013). *A Camparison of Teacher Jobs Satisfaction in Public and Private Schools. Academy of Educational Leadership Journal*, 58 (3). Retrieved from <http://www.iiste.org>.
21. Grace, K. W. (2014). *An Inquiry into Job satisfaction habits among Private Secondary School Teachers in Ireland. Journal of Educational and Social Research* 4, pp. 211 – 219.
22. Hackman, J. R. and Oldham, G. R. (1976). *Motivation through the design of work: test of a theory. Organizational Behavior and Human Performance* 16 pp. 250–279 Retrieved from: <http://www.orbee.org>.
23. Haskić, I. (2015). *Privatneškole u BosniiHercegovini. Sarajevo, Bosnia and Herzegovina. Školegijum*. Retrieved from <http://skolegijum.ba>.
24. Heller et al. (1993). *The relationship between teacher job satisfaction and principal leadership style. Journal of School Leadership* pp. 74–86
25. Herzberg, F., Mausner, B. and Snyderman, B. B. (1959). *The motivation to work*. New York, USA. John Wiley & Sons, cop.
26. Isaac Robert, G., Zerbe Wilfred, J., Pitt Douglas, C. (2001). *Leadership and Motivation: The Effective Application of Expectancy Theory. Journal of Management Issues*.
27. Ivancevich, J., Konopaske, R. and Matteson, M. (2005). *Organizational Behavior and Management*. Boston, USA. McGraw Hill
28. Judge, T. A., Thoresen, C. J., Bono, J. E. and Patton, G. K. (2001.). *The Job Satisfaction – Job Performance Relationship: A Qualitative and Quantitative Review. Psychological Bulletin* (Vol 127 pp. 376 – 407).
29. Kanton Sarajevo u Brojkama. (2016). *Bosnia and Herzegovina. Federal Office for Statistics of Federation of Bosnia and Herzegovina*.
30. Konopaske, R and Matteson, M. (2005). *Organizational Behavior and Management*. Boston, USA. McGraw Hill (pp.137).
31. Kranjec, S. (2015). *MotivacijazaposlenikatvrkiprivatnogsektoraVaraždinskežupanije. (Undergraduate Thesis, SveučilišnicentarVaraždin)*. Retrieved from: <https://dr.nsk.hr>.
32. Lastrić, D. (2002). *Nesigurnostposlaipovezanost s nekimstavovimapremaradu. (Undergraduate Thesis, Filozofskifakultet u Zagrebu, Department of Psychology)*. Retrieved from <http://darhiv.ffzg.unizg.hr>.

33. Latham, G. P. and Pinder, C. C. (2005). *Work motivation theory and research at the dawn of the twenty – first century*. *Annual Review of Psychology* (Vol 56 pp. 485 – 516). Retrieved from <http://www.hrma.ca>.
34. Luthans, F. (2002). *Positive organizational behavior: Developing and managing psychological strengths*. *Academy of Management Executive* (Vol 16, No 1, pp. 57 – 72). Retrieved from <http://amp.aom.org>.
35. MacMillan, R. B. (1999). *Influence of workplace conditions on teachers' job satisfaction*. *The Journal of Educational Research* pp. 39–47.
36. Maslow, A. H. (1954). *Motivation and Psychology*. Harper and Row Publishers, Inc.
37. Matei, A. and Fataciune, M. (2004). *Exploring the job satisfaction of public and private employees in Romania*. *Proceedings of the 10th International Conference on Business Administration (ICBA`16, Barcelona*. Retrieved from <https://papers.ssrn.com>.
38. McLeod, S. A. (2016). *Maslow's Hierarchy of Needs*. Retrieved from www.simplypsychology.org/maslow.html
39. Obradović, A. (2016). *Povezanost zadovoljstva plaćom i zadovoljstva poslom* (Undergraduate thesis, Ekonomski fakultet Zagreb). Retrieved from <http://darhiv.ffzg.unizg.hr>.
40. Ogochi, G. (2014). *Job Satisfaction and Teacher Effectiveness in Selected Secondary Schools in Trans Mara West District, Kenya*. *Journal of Education and Practice* 5 pp. 125 – 140.
41. Pinder, C. (1998). *Work Motivation in Organizational Behavior*. New Jersey, USA. Prentice Hall.
42. *Program razvoja male privrede za period 2016.-2019. godina*. (2016). Bosnia and Herzegovina. Ministry of Economy, Government of Canton Sarajevo, Federation of Bosnia and Herzegovina.
43. Rashid, S. and Rashid, U. (2012). *Work Motivation Differences between Public and Private Sector*. *American International Journal of Social Science* 1 pp. 24 – 33. Retrieved from <http://www.e3journals.org>.
44. Reif, W. (1975). *Intrinsic versus extrinsic rewards: Resolving the controversy*. *Human Resource Management* (Vol. 14, pp. 2 – 10).
45. Richard, D. (2000). *Motiviranizacija, Menadžerske tehnike i završni rezultati*. Zagreb, Croatia. M. E. P. Consult
46. Robbins, S. P. (2001). *Organizational Behavior*. 9th edition. Upper Saddle River, New Jersey, USA. Prentice Hall.
47. Rynes, L., Gerhart, B. and Minette, K. (2004). *The Importance of Pay in Employee Motivation: Discrepancies Between What People Say and What They Do*. *Human Resource Management* (Vol 43, No 4, pp. 381 – 394). Retrieved from <http://citeseerx.ist.psu.edu>.
48. Sasić, B. and Novaković, V. (2015). *Odnos prosječne plate u javnom i privatnom sektoru u Republici Srpskoj i njihov odnos prema obrazovanju*. *Časopis za ekonomiju i tržišnu komunikaciju*, 5 (1) pp. 99 – 117.
49. Schultz, D. P. (1982). *Psychology and industry today*. New York, USA.
50. Schwab, D. P. and Heneman, H. G. (1970). *Aggregate and individual predictability of the two – factor theory of job satisfaction*. *Personnel Psychology* 23 (1) pp. 55 – 66.
51. Senol, F. (2011). *The Effect of Job Security on the Perception of External Motivational Tools: A Study in Hotel Business*. *Journal of Economic and Social Studies*. Retrieved from <http://eprints.ibu.edu.ba>.
52. Shafiwu, A. B. and Salakpi, A. (2013). *Analysis of teachers Motivation on the Overall Performance of Public Basic School in the Wa Municipality*. *Research Journal of Finance and Accounting* 4 pp. 179 – 194. Retrieved from

53. Shultz, R. (1982). *Regulation and Public Administration*. Canadian Public Administration, Blackwell publishing Ltd. (Vol. 25).
54. Sindik, J. (2013). *Samoindicirana ulančana demotiviranost kod zaposlenik u državnom/javnom i privatnom sektoru*. *Ekonomski misao i praksa* 2 Zagreb pp. 515 – 534. Retrieved from <http://hrcak.srce.hr>.
55. Singh, R., Sharma, R. K. and Kaur, J. (2009). A Study of Job Satisfaction among Physical Education Teachers Working in Government, Private and Public Schools of Haryana. *Journal of Exercise Science and Physiotherapy* 5 (2) pp. 106 – 110.
56. Skinner, B. F. (1939). *The Behavior of Organism: An Experimental Analysis*. New York, USA.
57. Škoda I. (2016). *Motivacija u radnoj organizaciji na primjeru DM – DrogerieMarkt (Undergraduate thesis, Sveučilišni centar Varaždin)*. Retrieved from: <https://dr.nsk.hr>.
58. Stello, S. M. (2011). *Herzberg's Two – Factor Theory of Job Satisfaction: An Integrative Literature Review*. College of Education and Human Development. University of Minnesota
59. Stott, R. (2015). *Content and Process Theories of Motivation*. The Incentive Marketing Association.
60. Ubom, I. U. and Joshua, M. T. (2004). Needs satisfaction variables as predictors of job satisfaction of employees: Implication for guidance and counselling. *Educational Research Journal* 4(3) pp. 74 – 83. Retrieved from <http://journals.sagepub.com>.
61. Ullah I. (2012). *Impact of Incentives on Motivational Level of Employee*. *European Journal of Business and Management* 3 pp. 258 – 266.
62. Varga M. (2011). *Upravljanje ljudskim potencijalima kroz motivaciju*. Zbornik radova Međimurskog veleučilišta u Čakovcu 2(1) pp. 152 – 169. Retrieved from <http://hrcak.srce.hr>.
63. Vroom, V. H. (1964). *Work and motivation*. New York, USA. Wiley.
64. Wall, T. and Stephenson, G. (2007). Herzberg's two – factor theory of job attitudes: A critical evaluation and some fresh evidence. *Industrial Relations Journal* 1 pp. 41 – 65.
65. Wanous, J. P., Reichers, A. E. and Hudy, M. J. (1997). Overall job satisfaction: How good are single – item measures? ". *Journal of Applied Psychology* 82(2) pp. 247 – 252. Retrieved from <https://www.researchgate.net>.
66. Weinstein, N. (2014). *Human Motivation and Interpersonal Relationships*. Netherlands. Springer Netherlands.
67. Zembylas, M. and Papanastasiou, E. (2004). Job satisfaction among school teachers in Cyprus. *Journal of Educational Administration* 42(3) pp. 357–374. Retrieved from <http://www.emeraldinsight.com>.
68. Žužić, I. and Miljković-Krečar, I. (2013). *Zadovoljstvo poslom kod nastavnika privatnog i javnog Visokog Učilišta*. *Izborni znanstveni članak Zagreb* 155 (1-2) pp. 119 – 138.

